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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/613,842

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Daryl E. Anderson

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HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

SU, SUSAN SHAN

ART UNIT

PAPER NUMBER

3761

NOTIFICATION DATE

DELIVERY MODE

06/25/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM

ipa.mail@hp.com

jessica.l.fusek@hp.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/613,842	<b>Applicant(s)</b> ANDERSON ET AL.	
	<b>Examiner</b> SUSAN SU	<b>Art Unit</b> 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-32 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

1. PROSECUTION IS HEREBY REOPENED, as permitted by the guidelines set forth under MPEP §1214.04, in view of the reference(s) which indicate nonpatentability of any of the appealed claims as to which the examiner was reversed by the Board of Patents Appeals and Interferences. Authorization to reopen prosecution under 37 CFR 1.198 for the purpose of entering the new rejection Technology Center (TC) Director has been sought. See MPEP §1002.02(c) and MPEP §1214.07.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 4, 9, 16, 20, 28, & 30-31 are rejected under 35 U.S.C. 102(e) for being anticipated by Kerssies (US 2004/0267214).

With regard to Claim 1, Kerssies teaches an ophthalmic apparatus comprising:

an eye-positioning device (interior of 3) for assisting a subject in positioning  
an eye ([0013] & [0016]) in a desired position for administering a fluid to  
the eye; and

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an applicator (5) for dispensing the fluid into the eye when the eye is in the desired position.

With regard to Claims 2 & 4, Kerssies also teaches that the eye-positioning device comprises:

an eye-position detector (i.e. the reflective material of the device as disclosed in [0013]) for detecting the position of the eye; and  
a feedback mechanism (the reflection serves as a feedback to the user) for receiving information from the eye-position detector corresponding to the position of the eye,  
wherein the feedback mechanism is operable to provide visual cues that assist the subject in moving the eye to the desired position ([0013] & [0016]).

With regard to Claims 9 & 16, Kerssies also teaches that the applicator comprises:

a frame (3) for wearing ("wear" is broadly interpreted to mean "have on the body as a covering, ornament, or the like") on the head of the subject;  
a fluid dispenser (e.g. nozzle of 5) supported by the frame proximate the eye of the subject, the fluid dispenser configured to dispense fluid into the eye;  
and  
a fluid reservoir (5) for storing the fluid and delivering the fluid to the fluid dispenser.

With regard to Claim 20, Kerssies teaches an ophthalmic apparatus comprising:

a dispensing apparatus (5) for dispensing fluid into an eye of a subject;  
an eye-position detector (for detecting the current position of the eye relative to the dispensing apparatus ([0016])); and  
a feedback device for providing feedback information that assists the subject in moving the eye from the current position to a predetermined position relative to the dispensing apparatus for administering the fluid to the eye.

With regard to Claim 28, Kerssies teaches an ophthalmic apparatus for administering a liquid to an eye of a subject, comprising:

detecting means (reflecting material on the inside of 3) for detecting the position of the eye; and  
dispensing means (5) for dispensing the liquid into the eye when the eye is a predetermined position ([0013]).

With regard to Claims 30-31, Kerssies also teaches feedback means for providing feedback to the subject to assist the subject in moving the eye to the predetermined position of the detecting means detects that the eye is not in the predetermined position ([0013] and [0016]), wherein the feedback device is operable to provide an audible or visual feedback signal (a reflection is a form of feedback, also see [0016]) to the subject.

4. Claim 28 is rejected under 35 U.S.C. 102(b) for being anticipated by Vo (US 5,171,306). Vo teaches an ophthalmic apparatus for administering a liquid to an eye of a subject, comprising:

detecting means (800) for detecting the position of the eye; and

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dispensing means (500, Fig. 3) for dispensing the liquid into the eye when the eye is a predetermined position (Col. 9 lines 14-16).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-6, 9-10, 14-16, 18-20, 22, 23, & 29-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Vo in view of Yee (US 6,270,467).

With regard to Claims 1-4, 20, & 30-31, Vo teaches an ophthalmic apparatus comprising an eye-position detector (800) for detecting the position of the eye and an applicator (200, 300, 400, & 500) for dispensing a fluid into the eye when the eye is in the desired position. Vo does not teach a feedback mechanism. Yee teaches an ophthalmic apparatus with a feedback mechanism (30, 32, & 34) that provides audible or visual cues. A beep or a light such as taught by Yee (Col. 3 lines 10-21) would alert

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the subject and therefore would *assist* the subject in moving the eye to the predetermined position (by simply letting the subject know that the eye is not in the desired position. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vo with the cues of Yee for the purpose of actively causing the subject to change the eye position.

With regard to Claim 5, Vo does not teach a display. Yee teaches display monitor (6, Fig. 4). The language "for displaying a real time image and a target" is held to be intended use of the monitor. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Therefore the monitor of Yee is capable of displaying a real time image and a target. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vo with Yee for the purpose of allowing the user or practitioner to see the position of the eye.

With regard to Claims 6, 23, & 29, Vo does not teach an image pick-up device or an image processor. Yee teaches an image pick-up device (16) and an image processor (5, 12, & 64). The claim languages of "for capturing an image of the eye" and "for ... determining whether the eye is in the desired position for administering the fluid to the eye" are considered to be intended use of the imaging device and the image processor. Since the prior art invention substantially meets the structure of the current device as claimed, it is capable of performing the intended use and therefore meets the

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claim. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vo with Yee for the purpose of allowing the possibility to manipulate or process the recorded image for any necessary information.

With regard to Claims 9-10, 14-16, & 22, Vo also teaches a spectacle frame (see Fig. 1) for wearing on the head of the subject and a fluid dispenser (400 & 500) supported by the frame proximate the eye of the subject, the fluid dispenser configured to dispense fluid into the eye. Vo also teaches a fluid reservoir (200) and a controller (Col. 9 lines 15-16) that actuates the fluid dispenser (400 & 500) to dispense a predetermined dosage of fluid (Col. 4 lines 29-30 where "discrete eyedrops" is considered to be predetermined dosage).

With regard to Claims 18-19, Vo does not teach a graphical user interface. Yee also teaches a user interface (5, 68) that can be programmed to set the operating parameters of the apparatus and a graphical interface element (6, 70). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vo with Yee for the purpose of making the device more user-friendly.

8. Claims 11-13, 17, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vo in view of Bertera (US 5,368,582). Vo does not teach a jet dispenser. Bertera teaches a spectacle-like device with a thermal or piezoelectric jet dispenser (14) with a plurality of orifices to apply treating fluid into an eye (Col. 5 lines 1-12, Col. 9 lines 3-17, Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vo with Bertera for the purpose of utilizing a



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known technology in dispensing a dosage of treating fluid to the eye.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vo and Yee as applied to Claim 6 above, and further in view of Miwa (US 6,299,305). Vo and Yee do not teach that the image pick-up device comprises a CCD camera. Miwa teaches an ophthalmic apparatus that uses a CCD camera (10). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vo and Yee with Miwa for the purpose of using a known technology that may improve the accuracy of the eye position determination.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vo and Yee as applied to Claim 6 above, and further in view of Pavlidis (US 4,838,681) and Kerssies. Yee teaches a feedback signal but neither Vo nor Yee expressly teach that the feedback signals correspond to the directions for moving the eye. However, Yee teaches that the feedback signal can be a light displayed for the subject. Pavlidis teaches a medical diagnostic system that instructs the subject to follow the movement of a light with the eyes (Col. 13 lines 28-31). Kerssies teaches an ophthalmic device provided with a reflective material so that the subject can see his/her eye and focus on the nozzle of the eyedrop dispenser to move the eye to the desired position. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vo and Yee with the instructions of Pavlidis and Kerssies for the purpose of using a known technique (instructing subject to move the eyes by following a light, such as that

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of Yee) to achieve the desired result (moving the eye to a desired position for administering eyedrop).

11. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vo and Yee as applied to Claims 22-23 above, and further in view of Wickham et al. (US 6,159,186, "Wickham"). Vo and Yee do not teach that the image capture device is a digital camera. Wickham teaches a fluid delivery system that employs a digital camera (28) as an image uptake device, and an image processor (34) capable of processing that camera's images (Col. 2 line 66 to Col. 3 line 13). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vo and Yee with Wickham for the purpose of utilizing a known technology to better determine the eye position. Vo teaches a controller (Col. 9 lines 15-16) that controls a fluid dispenser (400 & 500).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUSAN SU whose telephone number is (571)270-3848. The examiner can normally be reached on M-F 9:00AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Susan Su/  
Examiner, Art Unit 3761

/Patricia Bianco/  
Supervisory Patent Examiner, Art Unit 3772  
For T. Zalukaeva, SPE AU 3761

/KAREN M. YOUNG/  
Director, Technology Center 3700